

**Notice of Allowability**

Application No.

10/780,357

Examiner

Andrew C. Lee

Applicant(s)

GU ET AL.

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 1/22/2008.
2. ☒ The allowed claim(s) is/are 1-7,9-20 renumbered 1 - 19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1 – 7, 9 – 20 are allowed.

## REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, does not disclose explicitly the limitations of:

“assigning a transmission rate to each of a plurality of terminals; assigning a start tag  $S_k^f = \max \{ V(A(t_k^f)), F_{k-1}^f \}$  and a finish tag  $F_k^f = S_k^f + L_p / (r_f \cdot C_f(t))$  to each packet, where  $k$  sequence number of the packet, in a particular series of packets  $f$ ,  $A(t_k^f)$  is an arrival time of the packet,  $L_p$  is a size of the packet in bits,  $V(\bullet)$  is a virtual time for the start tag, and  $r_f$  is a base transmission rate, and  $C_f(t)$  is a current transmission rate; and scheduling the series of packets for transmission between the terminals such that each terminal receives a substantially equal amount of transmission time over an extended period of time” as disclosed in claim 1;

“an error-free service model configured to define ideal packet flows that transmit at different rates over an error-free channel; a lead and lag model configured to determine leading packet flows and lagging packet flows, and to determine amounts of leading and amounts of lagging for the leading packet flows and the lagging packet flows, respectively; and a compensation model configured to compensate the lagging packet flows at an expense of the leading packet flows; and means for scheduling the series of packets for transmission between the terminals such that each terminal

receives a substantially equal amount of transmission time over an extended period of time" as disclosed in claim 18;

"means for assigning a transmission rate to each of a plurality of terminals; and means for assigning a start tag  $S_k^f = \max \{ V(A(t_k^f)), F_{k-1}^f \}$  and a finish tag  $F_k^f = S_k^f + L_p / (r_f \cdot C_f(t))$  to each packet, where  $k$  sequence number of the packet, in a particular series of packets  $f$ ,  $A(t_k^f)$  is an arrival time of the packet,  $L_p$  is a size of the packet in bits,  $V(\bullet)$  is a virtual time for the start tag, and  $r_f$  is a base transmission rate, and  $C_f(t)$  is a current transmission rate; and means for scheduling the series of packets for transmission between the terminals such that each terminal receives a substantially equal amount of transmission time over an extended period of time" as disclosed in claim 20.

3. Additionally, all of the further limitations in claims 2 – 7, 9 – 17, 19 are allowable since the claims are dependent upon the independent claims.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-

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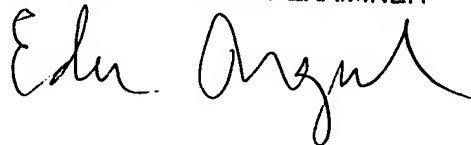
3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C. Lee/::<2/13/2008>

EDAN . ORGAD  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Edan Orgad', written in a cursive style.